A R O W
Alliance to Restore Our Waterways

Executive Brief

Contaminated waterways can pose risks to many types of organisms, including humans. Contaminants adsorbed to soil or in other forms may migrate from land, deposit from air, erode from aquatic banks or beds, or deposit from discharges from municipal sewers or historical industrial outfalls. Unfortunately, contaminated sediment is a widespread issue in the United States – contaminated sediment may be present in lakes, harbors, rivers, streams, floodplains, wetlands, along ocean shorelines and harbors, or in other water bodies – as a result of historic or ongoing contaminant sources.

Large-scale, urban sediment remediation projects are extremely complex. At most of these sites, multiple parties, including both industry and public entities, are responsible for the remediation to reduce potential risks. These projects frequently drag on for decades and costs for site investigation and remediation can easily exceed $100 million (with some proposed remedies exceeding $1 billion). In an effort to improve decision-making and effectiveness at these sites, the Alliance to Restore Our Waterways believes remedial decisions should protect human health and the environment through risk-based decisions that balance community, environmental, and economic considerations. This will help ensure that waterfront properties are restored to public use and/or enjoyment as quickly and safely as possible.

Issue:

Several issues need to be addressed and resolved to achieve the effective cleanup of these sites. In particular, all EPA Regions need to apply EPA's own 2005 Contaminated Sediment Guidance (Sediment Guidance); its use across the Regions is very inconsistent and in some cases, is being ignored. The Sediment Guidance requires EPA Regions to select remedies that are scientifically sound, nationally consistent, and based on proven principles of risk management. The Sediment Guidance is especially important at mega sites (sites with remedial costs over $50 million). The remediation process is also failing to ensure that all responsible parties are participating in sediment site remedies, and in many cases, does not recognize that these sediment sites often have experienced centuries of industrial and urban discharges from hundreds if not thousands of sources. These multiple problems are resulting in:

a. Lengthy and costly delays in the study phase at contaminated sediment sites of 10-20 years and investigation costs of over $100 million.
b. Remedies that do not address upstream, off-river or continuing sources of contamination and thus do not achieve the long term cleanup of these waterbodies.
c. Remedies that are not sufficiently or appropriately focused on risk reduction or sound science.
d. Remedies that can actually result in greater environmental impairments due to unavoidable releases of contaminants during dredging, leading to increased risks.
e. Remedies that are not implementable, cost-effective or sustainable.
f. Remedies that disrupt bridges, transportation and community lives for years.

Solutions:

1. EPA HQ needs to insist that its Regions consistently apply and enforce EPA's Sediment Guidance, which sets forth a scientifically-based framework for evaluating and remediating the nation's contaminated sediment sites, and for ensuring that remedies are sustainable. EPA HQ needs to insist that the recommendations from its existing internal procedure for the evaluation of proposed remedies at sediment sites be followed, which involve a system of checks and balances – through the internal peer review by the National Remedy Review Board (NRRB) and the Contaminated Sediments Technical Advisory Group (CSTAG).
2. EPA needs to follow its own policies requiring the Agency to involve all responsible parties in major sediment remedies. While this is EPA's stated formal policy, in many regions it is ignored.
3. EPA needs to use a more collaborative approach for remedy selection and implementation, prioritizing higher risk areas and achieving consensus among responsible parties and other stakeholders. EPA has numerous successful examples of this approach in other programs; it is time to apply these to the Superfund program.

Objective:

To achieve more effective, more expeditious and cost-effective cleanups of sediment sites through sound national contaminated sediment remediation policy. Ultimately, this will result in faster protection of human health and the environment, earlier use of affected natural resources, and accelerated commercial and/or recreational redevelopment of adjacent upland areas.